UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------|----------------------------------|----------------------|---------------------|------------------|
| 10/518,378 | 02/08/2005 | Geir Jensen | 04247 | 8964 |
| | 7590 08/22/200 CHULTZ & MACDO | EXAMINER | | |
| 1727 KING STREET | | | FONSECA, JESSIE T | |
| SUITE 105 ALEXANDRIA | A, VA 22314 | | ART UNIT | PAPER NUMBER |
| | | | 3637 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | , | 08/22/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
|--|---|--|--|--|--|
| | 10/518,378 | JENSEN, GEIR | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| · | Jessie Fonseca | 3637 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period way reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE! | I. lely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | • | | | |
| <u> </u> | Responsive to communication(s) filed on 29 May 2007. | | | | |
| , _ | · | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | • | | | | |
| 4) Claim(s) 9-17 is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6) Claim(s) 9-17 is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to 8) Claim(s) are subject to restriction and/or | r election requirement. | | | | |
| Olami(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | |
| 10)⊠ The drawing(s) filed on <u>29 May 2007</u> is/are: a) accepted or b)⊠ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| , — , , , , , , , , , , , , , , , , , , | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a) All b) Some * c) None of: | | | | | |
| 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in Application No | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
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| | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) | Paper No(s)/Mail Da 5) Notice of Informal P | | | | |
| Paper No(s)/Mail Date 6) Other: | | | | | |

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DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the metal pipes filled with liquids, minerals or mixtures; and the grille body and the permeable element arranged in a frame must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With regards to claim 9, 13, and 16: Disclosure is not understood. It's unclear as to what is the difference between the at least one permeable flame blocking and heat absorbing and heat accumulating grille body and the at least one permeable element incorporating intumescent material. Applicant specification discloses a rectangular plate (13) of a heat absorbing and heat storing material (14) and a grille body (12) treated with intumescent material. It's difficult to ascertain how the heat absorbing and heat storing material is a grille, when the grille is a separate element as disclosed on page 3, lines 23-28 of the disclosure. Claim recitation is not consistent with the specification.

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With regards to claim 12: Disclosure is not understood. It's unclear how the heat absorbing and heat storing body is formed and how that structure can be, as it is not shown or described.

With regards to claim 14: Disclosure is not understood. It's unclear how the grille body and the permeable element are arranged in a frame and how that structure can be, as it is not shown or described.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

As best understood, claims 9-11 and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Baltazar (US 5,750,927)

With regards to claim 9: Baltazar discloses a fireblocking device (fig. 3b) comprising:

at least one permeable flame blocking and heat absorbing and heat
accumulating grille body (14) which is capable of stopping flames during
instant and constant flame impact in the initial phase of flame impact (col.
6, lines 20-24; col. 6, lines 63-67), and

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 at least one permeable element (10) incorporating an intumescent material (28), capable of permanent fire stopping (fig. 3B; col. 7, lines 5-10).

The fireblocking device for continuously preventing in a flame impact period the transfer of flames from a flame front through the ventilation apertures and passages, in opening for thermal fire ventilation, in ventilation ducts, in process plants and in vented façade exteriors is related to an intended use and is given little patentable weight.

With regards to claim 10: Baltazar further discloses a heat absorbing storing body (14) that is three-dimensional (fig. 1 and 3B).

With regards to claim 11: Baltazar further discloses the grille body (14) is rectangular in cross-section (fig.3B).

With regards to claim 16: Baltazar further disclose the grille body (14) is positioned downstream of the permeable (10) containing intumescent material (28), the permeable element being positioned towards the flame front (fig. 3b; col. 7, lines 5-10).

With regards to claim 17: Balthazar further discloses a form of a fire blanket, which is known in the art as a thick covering layer (fig. 3b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

As best understood, claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baltazar (US 5,750,927) in view of Anderberg (US 3,976,825).

With regards to claim 12: Baltazar fails to disclose the heat absorbing and heat storing body can contain metal pipes filled with liquid, minerals or mixes of these minerals as main element. However, Anderberg discloses pipes passing through lead-throughs, which are resistant to heat (col. 1, lines 23-26; col. 2, lines 9-15). It is widely known in the art that pipes found in building structures carry liquids having minerals (i.e. tap water). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fireblocking device of Baltazar to have the heat absorbing and heat storing body contain metal pipes instead of cables as taught by Anderberg in order to protect the pipes in the event of a fire.

With regards to claim 13 and 14: Baltazar didscloses a grille body and permeable element but fails to disclose grille body comprises a honey comb-patterned sheet-metal, in which the grille body and the permeable element can be arranged into a frame.

However, Anderberg discloses honey-comb-patterned sheet metal having permeable elements to serve as a lead-throughs (Anderberg- fig. 1, col. 3, line 66 – col.4, line 4),

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which came be arranged in the frame (3a, 3b, 3c, 3d). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have the heat absorbing and heat storing body of Baltazar include a honey comb-patterned sheet-metal, which the grille body and permeable element can be arranged into a frame as taught by Anderberg to arrange the pipes in a predetermined configuration, while protecting the pipes from possible fire hazards.

With regards to claim 15: Baltazar, in view of Andeberg, further discloses an insulation material in the form of plastic film is provided on the grille body(Anderberg – col. 7, lines 10-25), therfore creating a insulating material between the grille body (14 – Balthazar) and the permeable element (10 – Baltazar) to serve a thermal break, as per the modification above.

Response to Arguments

Applicant's arguments filed 5/29/07 have been fully considered but they are not persuasive.

In response to the applicant argument that the device of Baltazar cannot serve as a vent, the examiner disagrees. Baltazar clearly discloses heat (15) passing through the structure, including layer 14 (fig. 3a and col. 6, lines 54-56).

In response to the applicant's arguments that layer 14 serves as an intumescent material and not a heat absorbing body. The examiner disagrees, as Baltazar clearly disclose layer 14 as a heat sink layer that is able to absorb and dissipate heat (col. 6,

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lines 20-23 and lines 39-43). The examiner fails to see how layer 14 is an intumescent material as claimed by the applicant.

The drawing objection is withdrawn in view of the replacement drawings filed 5/29/07.

The objection to the specification is withdrawn in view of the applicant's amendment and arguments filed 5/29/07.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessie Fonseca whose telephone number is (571)272-7195. The examiner can normally be reached on M-F 8:30am-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571)272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JF JE 8/16/07

> LANNA MAI SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600

or server

IN THE SPECIFICATION:

Page 1, line 2, insert:

This application is a filing under 35 USC 371 of PCT/NO2003/000238 filed July 4, 2003.

BACKGROUND OF THE INVENTION

Field of the Invention

line 9:

Background Description of Related Art

Page 2, line 10:

Object SUMMARY OF THE INVENTION

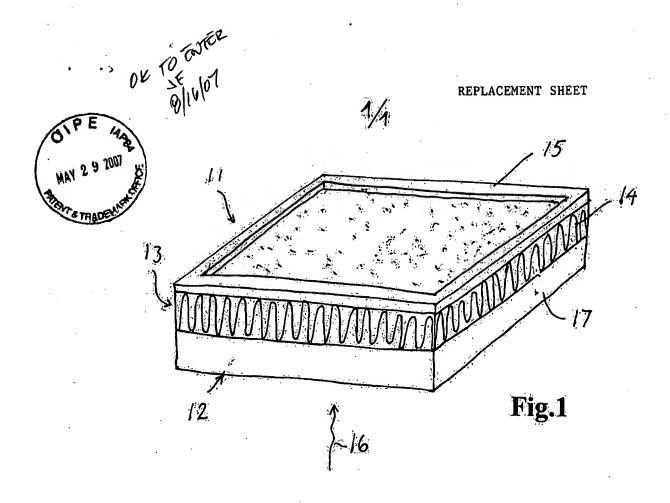
delete line 25;

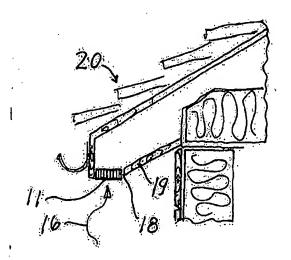
lines 26-28:

The invention is indicated in claim 1. With "grille body" is meant any body that allows flow through a plurality of evenly distributed openings, where each opening is small compared to the total cross-section of the body.

The invention is directed to a fireblocking device for continuously preventing in a flame impact period, the transfer of flames through ventilating apertures or similar passages, in openings for thermal fire ventilation, in ventilation ducts, in process plants or in vented facade exteriors. The device is characterized by at least one permeable flame blocking and heat absorbing and heat accumulating grille body to stop flames during instant and constant flame impact in the initial phase of flame impact, and at least one permeable element containing and/or incorporating an intumescent material, for permanent fire stopping in the last phase of the flame impact period.

The term "grill body" is used to denote any body that allows flow through a plurality of evenly distributed openings, where each opening is small compared to the total cross section of the body.





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Fig.2